

# ABSTRACT

A user initially judges whether each of pieces of information input as learning information is necessary or unnecessary, matrix elements of an affirmative metric signal indicating the records of the necessary information and matrix elements of a negative metric signal indicating the records of the unnecessary information are calculated in a learning unit from a plurality of keywords attached to the necessary information and the unnecessary information. Thereafter, a plurality of keywords attached to each piece of information data input to be estimated are converted into a vector in a vector generating unit, and an affirmative score signal and a negative score signal are calculated from the vector and the affirmative and negative metric signals in a score calculating unit. A value of the affirmative score signal is increased when many of keywords attached to a corresponding piece of information data are attached to the necessary information, and a value of the negative score signal is increased when many of keywords attached to a corresponding piece of information data are attached to the unnecessary information. Thereafter, necessity of each piece of information data is calculated from the affirmative and negative score signals, and the pieces of information data are stored in an unread data storing unit in order of necessity. Accordingly, information having a high necessity for the user can be easily

retrieved from a large volume of information.